BOSTON PUBLIC LIBRARY
3 9999 06584 733 5

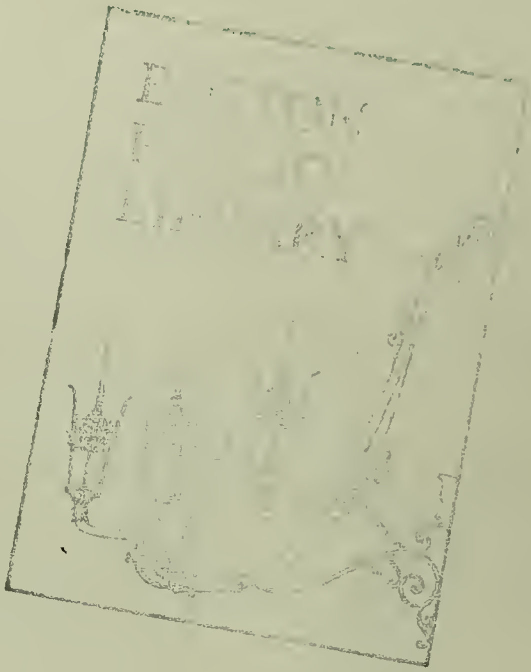
Gov 12-1874

BRA Library

RIZZO ASSOCIATES, INC.

ENGINEERS AND ENVIRONMENTAL SCIENTISTS

GOVDOC
BRA
4510



PROJECT NOTIFICATION FORM

Tufts International Biomedical Research Center
South Station Air Rights
Boston, Massachusetts

Submitted to:
Boston Redevelopment Authority

Submitted by:
TUDC

December 11, 1992

I. SUMMARY

A. Project Identification

1. **Project Name:**
   - Tufts International Biomedical Research Center

2. **Address/Location:**
   - South Station/Atlantic Avenue, Boston, Massachusetts

3. **Current Property Owner:**
   - Boston Redevelopment Authority

4. **Developer:**
   - TUDC, Inc.
     755 Atlantic Avenue
     Boston, MA 02111
     Contact: David Moffatt

5. **Development Consultant:**
   - Meredith & Grew, Inc.
     160 Federal Street
     Boston, MA 02210
     Contact: Brian L.P. Fallon

6. **Architect:**
   - Elkus/Manfredi Architects, Ltd.
     530 Atlantic Avenue
     Boston, MA 02210
     Contact: Samuel Norad

7. **Legal Counsel:**
   - Palmer & Dodge
     One Beacon Street
     Boston, MA 02108
     Contact: John G. Casagrande Jr., Esq.

8. **Consultants:**
   - Rizzo Associates, Inc.; Environmental and Transportation Consultants
     235 West Central Street, Natick, MA 01760
     Contact: Elizabeth K. Levin

   - R. G. Vanderweil Engineers; Utility Consultants
     266 Summer Street, Boston, MA 02210
     Contact: Garen Demerchian

   - Tech Environmental, Inc.; Air and Noise Consultants
     Reservoir Place, 1601 Trapelo Road, Waltham, MA 02154
     Contact: Peter Guldberg

9. **Estimated Commencement and Construction Dates:**
   - Construction is scheduled to start on Section C in 1995 and be completed in 1998. The parking facility (564 spaces, with the possible addition of 400 spaces) will be completed in 1995. The 380,000 square feet of laboratory and research facilities will be completed in 1998.

     The schedules for Sections B and A are undetermined.

10. **Approximate Cost:**
    - Sections A, B and C are estimated to cost $440 million. Section C is $100 million, Section B is $200 million, and Section A is $140 million.

11. **Status of Project Design:**
    - Schematic Design - Section C

12. **Applicability of Article 31, Boston Zoning Code:**
    - The project is subject to Article 31.

B. Narrative Project Description

The Tufts International Biomedical Research Center is an integral component of the South Station Air Rights Development Project, a joint effort by TUDC, Inc., the Boston Redevelopment Authority (BRA), and

the Massachusetts Bay Transportation Authority (MBTA). TUDC is a wholly owned subsidiary of Tufts University. It has been designated by the BRA as the developer of the South Station Air Rights. The area to be developed for the Tufts International Biomedical Research Center extends from column line 1 northward to column line 36 above the current South Station. Figure 1 shows the site location; Figure 2 is an illustrative rendering of the proposed project; and Figure 3 identifies the column lines. The proposed project will combine a variety of uses, including parking, laboratories, office space, miscellaneous retail, and possibly a hotel.

Background

The South Station Air Rights Development began with the planning and construction by the MBTA of an intermodal transportation center at South Station and the headhouse restoration. These aspects of South Station's redevelopment (MBTA Phase 1), now complete, included construction of foundations for anticipated subsequent air rights development over the tracks at the transportation center.

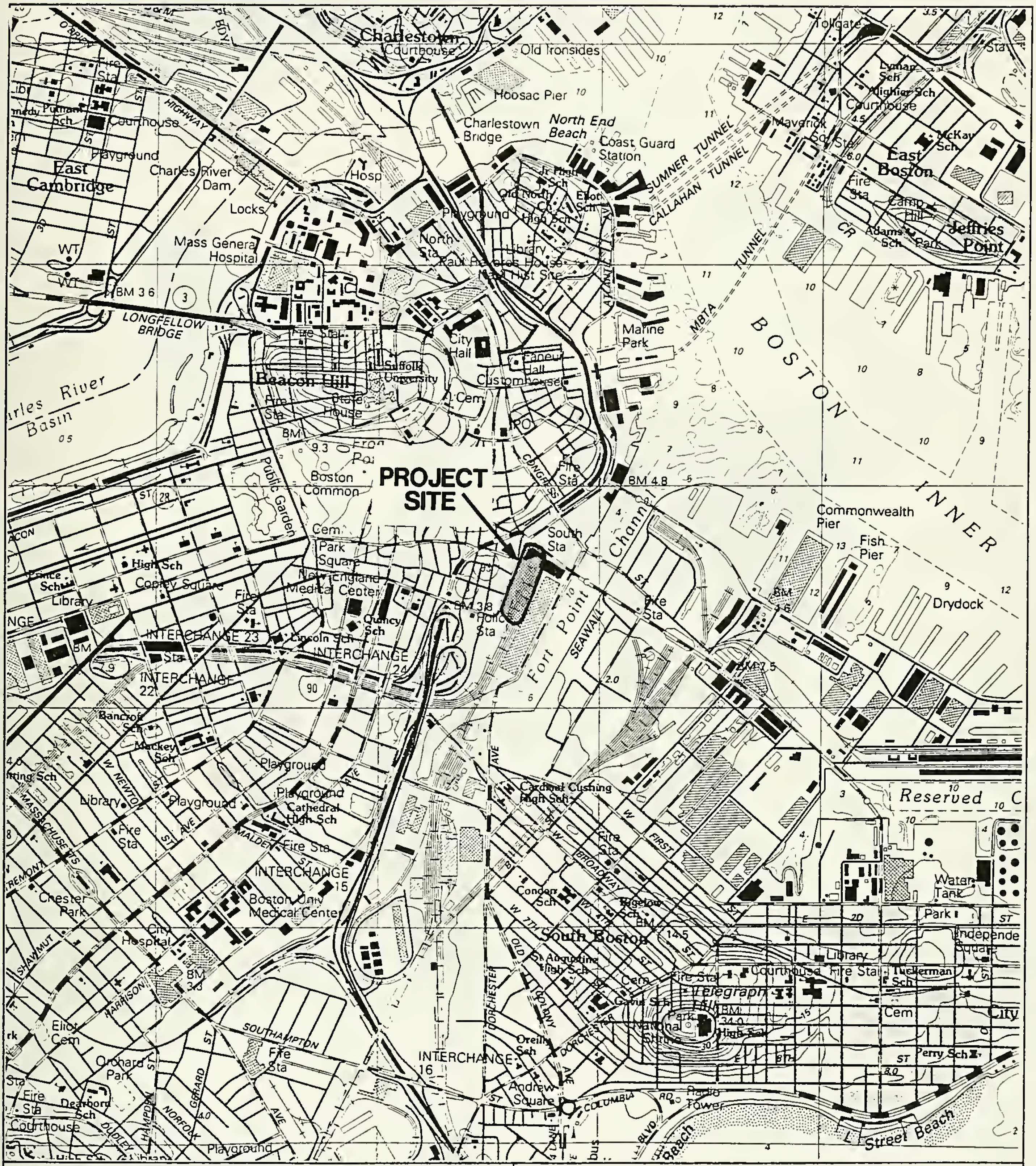
As shown in Figure 3, the second stage of the South Station redevelopment project (MBTA Phase 2A and 2B, which is commencing construction) will entail the construction of an MBTA bus terminal and parking facility at the southerly end of the transportation center, south of column line 20/21 on levels AR-1 and AR-2. The bus terminal (level AR-1) will consist of approximately 110,000 square feet. One deck of parking (level AR-2) will be constructed above the terminal to accommodate 225 vehicles. The structural design for the bus terminal and parking facility is intended to accommodate subsequent air rights development. New ramp structures will serve as South Station connectors providing access and egress from Utica and Kneeland Streets to the structure. Further work north of column line 20/21 is anticipated in Phase 2C of the MBTA project, which will consist of the expansion of Phase 2A. This expansion will be approximately the same type and scale of development as Phase 2A.

TUDC/BRA Project

The proposed Tufts International Biomedical Research Center is divided into three sections (C, B, and A). Section C involves the construction of two levels of parking (approximately 564 spaces on levels AR-3 and AR-4)

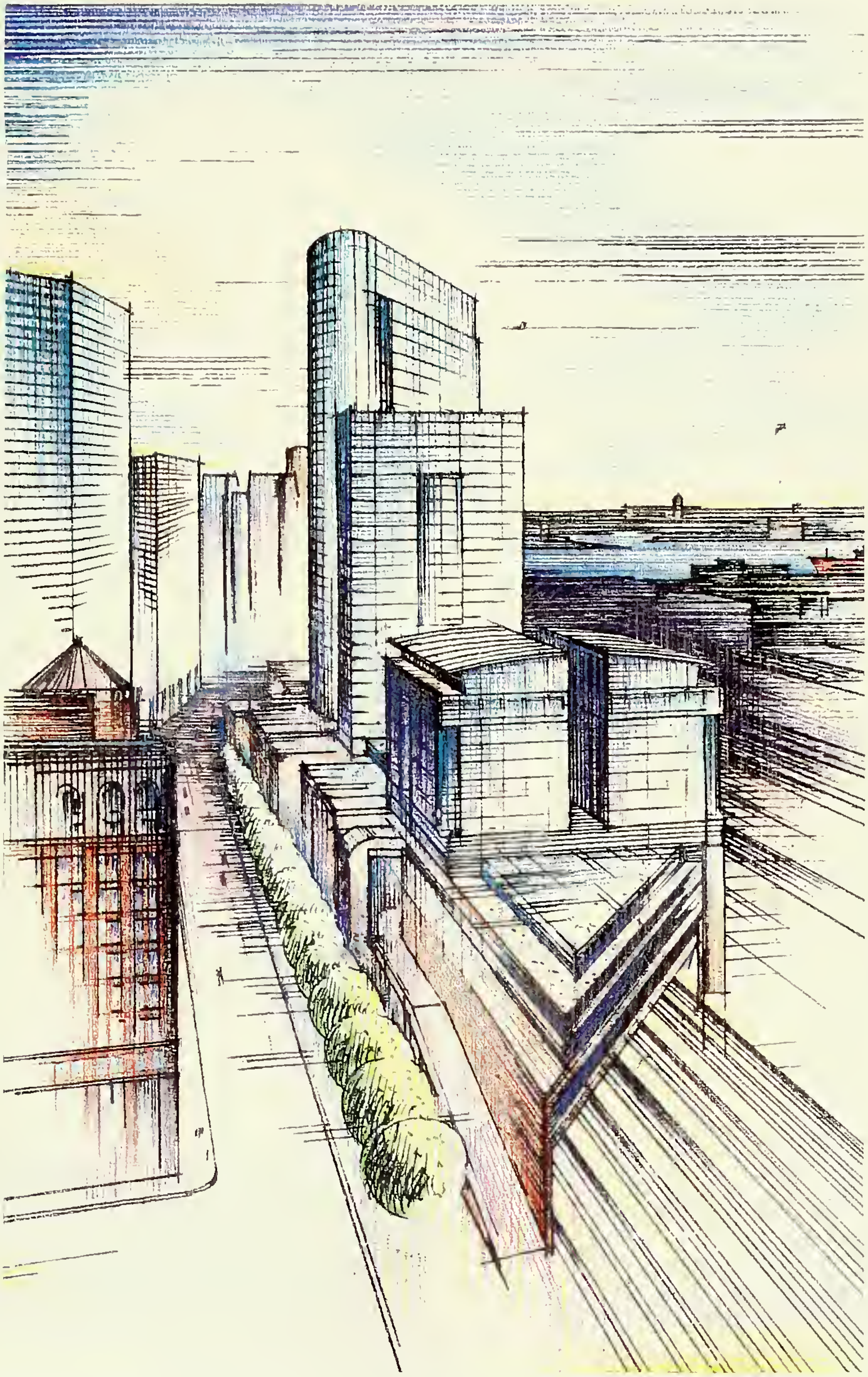
Digitized by the Internet Archive
in 2011 with funding from
Boston Public Library

http://www.archive.org/details/projectnotificat00rizz



Base Map: USGS Topographic Map
Boston South, MA Quadrangle

Figure 1:
Location Map
Tufts International
Biomedical Research Center



Source: Elkus/Manfredi Architects Ltd.

View Facing Northerly

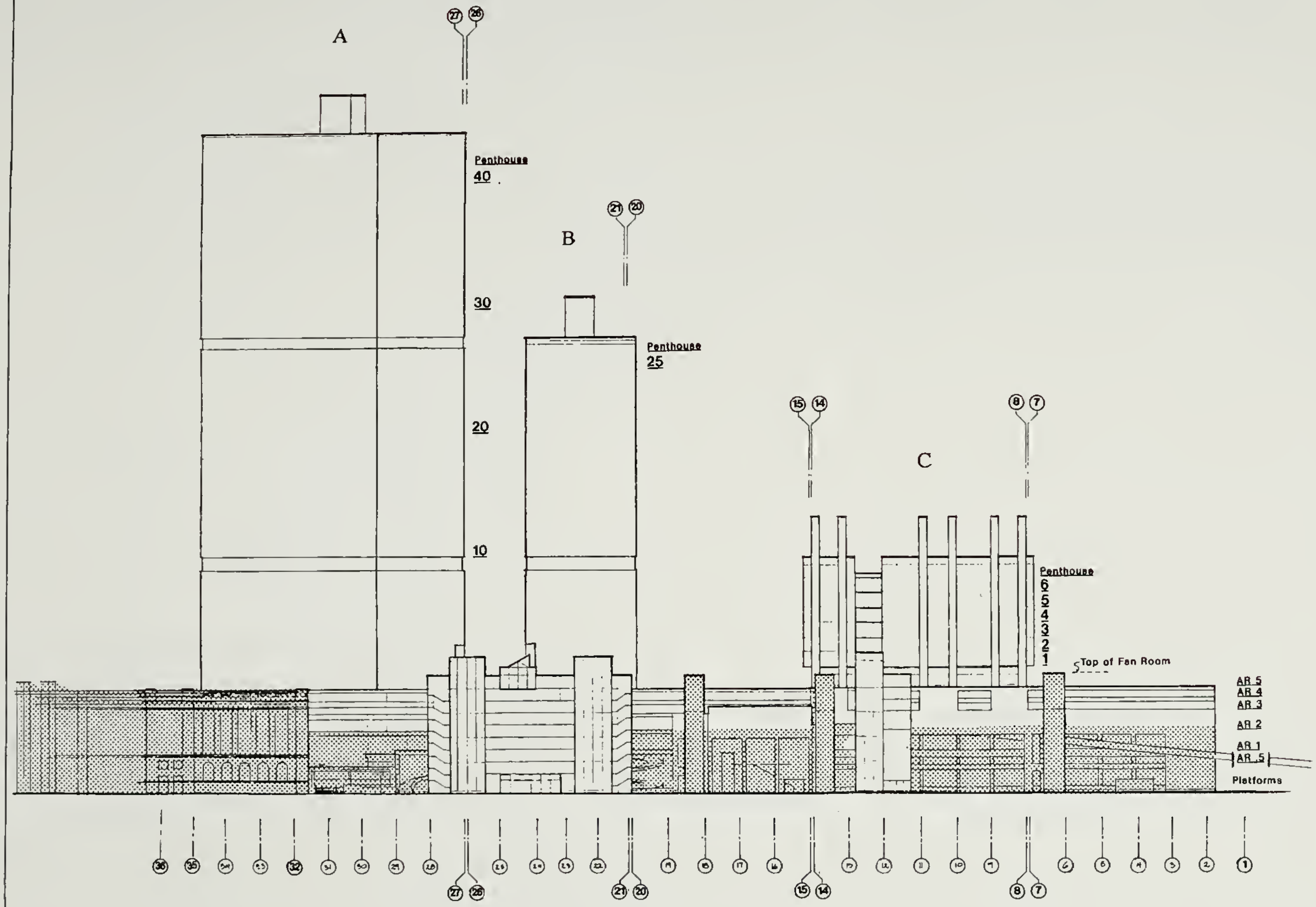
Not To Scale

N

Figure 2:

Illustrative Rendering

Tufts International
Biomedical Research Center



Legend

Tufts International Biomedical Research Center

Section A	Column Line 26/27 to 36
Section B	Column Line 14/15 to 26/27
Section C	Column Line 7/8 to 14/15

MBTA Project ▨

MBTA Phase 1	Column Line 32(±) to 36
MBTA Phase 2A	Column Line 1 to 20/21
MBTA Phase 2B	Ramp Connections
MBTA Phase 2C	Column Line 20/21 to 32(±)

Figure 3:
Atlantic Avenue Elevation
Tufts International
Biomedical Research Center

Source: Elkus/Manfredi Architects Ltd.

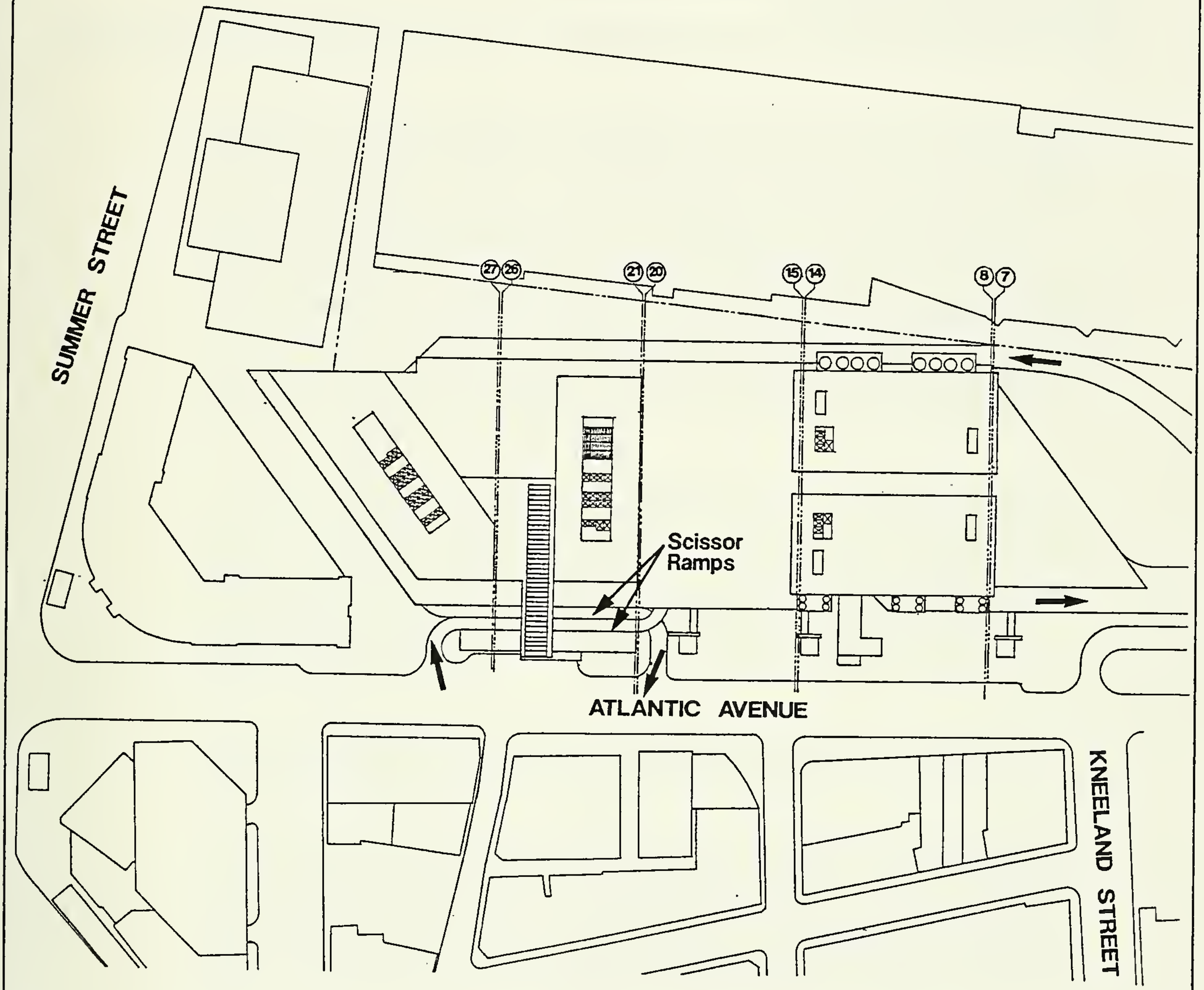
Not To Scale

above the MBTA parking deck and approximately 380,000 square feet of space in two 7-story buildings. The parking, referred to as Section C1 parking, includes a delivery/loading dock with six spaces.

The buildings will be occupied by Tufts University-sponsored laboratories, corporate biomedical research facilities, and the regional offices of biomedical-related federal agencies, such as the National Institute of Health, the Food and Drug Administration, and the Environmental Protection Agency (EPA). Section C may be developed in two parts. Section C1, which is scheduled to be built in 1995, will consist of the two levels of parking on levels AR-3 and AR-4, and a building platform on AR-5. Section C2, which is scheduled to be built in 1998, will consist of the 7-story laboratory and research buildings.

Section B of the South Station Air Rights Development will consist of up to 650,000 square feet of office, laboratory, miscellaneous retail, or hotel space in one or two buildings of up to 25 stories located north of the Section C laboratory buildings. Section A of the South Station Air Rights Development will consist of approximately 1,000,000 square feet of office space in one 40-story building. Elevation drawings of the proposed structures are shown in Figure 3. Sections B and A may be built simultaneously, with shared entry and lobby space. An additional 400 parking spaces are proposed north of column line 20/21 as part of Sections B and A. This parking, referred to as Section B1 and A1, may be built in conjunction with Section C1 parking or subsequent to the Section C1 construction.

Traffic access is proposed to serve the parking for Section C and Sections B and A of the development (see Figure 4). The access configuration for Section C1 parking (564 spaces) will consist of ramps entering and exiting level AR-2 from the south, with the entry ramp running along the east side and the exit ramp departing along the west side of the building. These ramps will provide access to the regional highway system to the south (Central Artery), west (Massachusetts Turnpike), and east (Seaport Access Road) either directly or via the local street network. Local access to and from downtown Boston will have surface street connections with these ramps by means of a viaduct at Kneeland Street opposite the surface artery. The project access ramps will serve all-purpose traffic, including the MBTA bus terminal and parking and the project



Source: Elkus/Manfredi Architects Ltd.

Not To Scale

Figure 4:

Proposed Access
Tufts International
Biomedical Research Center

parking and delivery vehicles. Currently, these ramps are planned for High Occupancy Vehicles (HOV). Initial assessments indicate that the ramps can accommodate both HOV and non-HOV traffic. Minor modifications, which consist only of relocating HOV enforcement locations and installation of appropriate signage, will reduce vehicle-miles traveled (VMT) and improve access efficiency. The additional non-HOV traffic on the modified HOV ramp segments will have no significant impact upon the level of service, queues, or safety during peak traffic loading and will retain the integrity of the HOV system for all other ramp-to-ramp interchange movements. Internal circulation between parking levels is via adjacent ramps south of column line 20/21.

A variety of options for the access configuration for Section B1 and A1 parking are being studied with the MBTA (see Figure 4). Options include helices to Kneeland Street and "scissor-type" ramps located between column line 19 and 29. Access is at street level on Atlantic Avenue with the entry lane north of column 28 and the exit lane south of column lines 20/21. A drop-off zone is located at Atlantic Avenue between column lines 23 and 28.

The internal parking layout has been designed to enable circulation between parking Sections C1 and B1/A1, if desired.

The parking is intended primarily for the use of the project development. Section C1 parking will serve employees of the Tufts University laboratory and research buildings. Sections B1/A1 parking will serve employees of the office building(s), hotel employees/guests, and miscellaneous retail uses. Thus, nearly all of the parking will be occupied by all-day, long-term users.

If the project parking is constructed and operational prior to the building space, it will serve as temporary replacement parking for designated downtown employee users whose parking spaces have been removed as a result of the Central Artery/Third Harbor Tunnel (CA/THT) reconstruction.

Table 1 summarizes the components of and estimated schedule for the Tufts International Biomedical Research Center.

TABLE 1

SCHEDULE

Section	Proposed Use	Square Footage	Estimated Construction Date
C1	Parking	225,000	1995
C2	Laboratories	380,000	1998
A1, B1	Parking	225,000	Undetermined
A2, B2	Office, hotel, laboratories, and miscellaneous retail	1,650,000	Undetermined

Coordination with MEPA and Article 40

An Environmental Notification Form (ENF) for the project, dated June 1, 1992, was filed with the MEPA Unit. On September 30, 1992, the Secretary of Environmental Affairs issued a certificate designating the project as Major and Complicated and establishing a special procedure for its review.

Under the Secretary's Certificate, the project proponent will prepare a Project Overview Analysis, evaluating overall project impacts on a gross scale. Individual environmental assessments will also be prepared for each phase of the project. This will ensure that each phase of the project is fully studied in the context of a broad evaluation of the overall project. It is expected that the first environmental assessment (for Section C) and the Project Overview Analysis will be prepared simultaneously.

The proponent requests permission to submit an overall Project Impact Overview analyzing the project generally and individual Project Impact Reports for each section of the project under Article 31 and Article 40. Such submissions would be joint submissions under Article 31, Article 40, and MEPA.

In addition, TUDC intends for the project to be developed as a planned development area under Article 40 of the Zoning Code. The proponent also requests that each Project Impact Report for the project also constitute an approved development plan for that section of the project under Article 40 (see Section F).

C. Project Benefits

The Tufts International Biomedical Research Center is an integral component of the South Station Air Rights Development Project, a joint effort by TUDC, the BRA, and the MBTA. The air rights project has been initiated and planned with the Boston Redevelopment Authority, which has included the proposed development in its revised zoning for this area. The project has significant public benefits including the following:

- The Tufts University-sponsored laboratories and biomedical research facilities will expand the job base of Boston in this critical industry, as well as promote Boston's leadership role in the growing biomedical industry. The project will provide significant new economic opportunities for residents of Chinatown, South Boston, and all other Boston neighborhoods, both in terms of permanent jobs and career training and advancement. Approximately 6,000 new permanent jobs will be created. In addition, during construction the project will create approximately 6,000 construction jobs (person-years).

- The project enhances South Station's role as an intermodal transportation facility. Employees of and visitors to the Tufts International Biomedical Research Center, including the hotel and office development, will be significant users of the variety of public and private transportation modes provided by the transportation facility.

- The project will expand the tax revenues to the city of Boston by providing substantial private development on previously unused air rights.

- The project plays an important development and architectural role in defining the South Station area. The project has been conceived to place a significant office tower immediately behind the recently renovated South Station headhouse. This building is intended to define the last open corner of Dewey Square as bounded by One Financial Center, the Federal Reserve Bank, the Fiduciary Trust Building, and South Station.

D. Community Review Groups

As part of the overall redesign and development of Dewey Square, the project has been developed with considerable input from the involved public agencies and the public, particularly the Chinatown community. The Boston Redevelopment Authority, the Massachusetts Bay Transportation Agency, the CA/THT Project, neighborhood groups, and TUDC have all held many meetings in the planning and coordination of this project. As part of the BRA Article 31 process, additional substantial community outreach will be undertaken.

E. City, Federal or State Agencies From Which Permits or Other Actions Will Be Sought

Permits, approvals or other actions may be required from the following public agencies:

Agency	Permit or Action
Massachusetts Historical Commission	Determination of no adverse impact
Department of Environmental Protection, Division of Water Pollution Control; Boston Water and Sewer Commission	Sewer Extension/Connection Permit
Department of Environmental Protection, Division of Water Pollution Control	Cross-connection Permit
Massachusetts Environmental Policy (MEPA) Unit	MEPA Review
Massachusetts Water Resources Authority	Sewer Use Discharge Permit
Department of Environmental Protection, Division of Air Quality Control	Air Plans Approval
Department of Environmental Protection, Division of Air Quality Control	Pre-construction Notice
Department of Transportation, Federal Aviation Administration	Notice of Construction of Structure exceeding 200 feet in height

Massachusetts Bay Transportation Authority, Federal Railroad Administration, and other state and federal agencies, as necessary	Easements, operating agreements, and other arrangements

Additional permits, approvals or actions may be required as the project is refined and developed further.

F. Zoning

The project is located within the New Economy Development Area subdistrict of the South Station Economic Development Area, established under the provisions of Article 3 of the Boston Zoning Code. Under the provisions of the Zoning Code, a project that meets certain requirements applicable in that subdistrict may qualify as a planned development area (PDA), which requires the project proponent to submit a development plan to the Boston Redevelopment Authority for its approval and the approval of the Zoning Commission. TUDC intends for the project to be designed and constructed in conformance with the approved development plan and the applicable requirements outlined in Article 40 of the Zoning Code. As a PDA, the project (if complying with the use and dimensional requirements of Article 40) will not be required to seek zoning approval or relief from the Boston Board of Appeal. TUDC intends each Project Impact Report as approved by the Authority to constitute an approved development plan under Article 40 of the Zoning Code.

II. PROJECT DESCRIPTION

The Tufts International Biomedical Research Center will be a $440 million mixed-use development designed for approximately 5.5 acres of air rights at South Station. The development will contain over 2,000,000 square feet of development including laboratories, office, hotel, and miscellaneous retail uses, as well as 964 parking spaces. The development is an integral part of the South Station Intermodal Transportation Center and an important public/private partnership initiative.

A. Location Map and Site Plan

The site location and the proposed development plans are illustrated in the following figures, shown previously.

- Figure 1 – Location Map, Tufts International Biomedical Research Center
- Figure 2 – Illustrative Rendering, Tufts International Biomedical Research Center
- Figure 3 – Atlantic Avenue Elevation, Tufts International Biomedical Research Center
- Figure 4 – Proposed Access, Tufts International Biomedical Research Center

B. Dimensions

The site for the proposed Tufts International Biomedical Research Center consists of approximately 5.5 acres of currently unused air rights at South Station. The proposed Tufts International Biomedical Research Center is divided into three sections (C, B and A). Section C involves the construction of two levels of parking (approximately 564 spaces on levels AR-3 and AR-4) above the MBTA parking deck, and approximately 380,000 square feet of space in two 7-story buildings. The buildings will be occupied by Tufts University-sponsored laboratories, corporate biomedical research facilities, and the regional offices of biomedical-related federal agencies, such as the National Institute of Health, the Food and Drug Administration, and the EPA.

Section B will consist of up to 650,000 square feet of office, laboratory, miscellaneous retail or hotel space in one or two buildings of up to 25 stories located north of the Section C laboratory buildings. Section A will consist of approximately 1,000,000 square feet of office space in one 40-story building. An additional 400 parking spaces are proposed north of column line 20/21 as a part of Sections B and A. Elevation drawings of the proposed structures are shown in Figure 3.

Table 2 summarizes the development characteristics of the project. The floor area ratio of the development when complete is estimated at approximately 8.5.

TABLE 2

PROJECT CHARACTERISTICS

Section	Proposed Use	Square Footage	Height (Feet)[1]
C1	Parking	225,000	100
C2	Laboratories	380,000	227
A1, B1	Parking	225,000	100
A2, B2	Office, hotel, laboratories and miscellaneous retail	1,650,000	645

[1] Reflects height as measured from ground level.

C. Transportation Component

A Transportation Access Master Plan will be filed with the City of Boston Transportation Department and the Boston Redevelopment Authority as part of the Project Impact Report.

The transportation assessment will evaluate the impacts of the proposed project upon the roadway, traffic control, public transit, and pedestrian networks. Two design years will be analyzed: (1) 1998, with completion and occupancy of the parking garage/laboratories and partial completion of the Central Artery reconstruction, and (2) 2010, after completion of the Central Artery project. The study area will include Dewey Square, the ramps/intersections at the reconstructed I-90/I-93 interchange, and Atlantic Avenue between the interchange and Dewey Square. Additional traffic volume, pedestrian, and public transit counts will be performed, as necessary, to supplement available data and projections.

A comprehensive trip generation analysis will be performed for the development, identifying trip purpose and modal split. Background traffic projections will be based on the latest available year 1997 and 2010 volumes from the CA/THT. The build analysis will evaluate access to the project from I-90/I-93. The build analysis will also investigate the traffic operation at the proposed access on Atlantic Avenue, level of service impacts at Dewey Square, pedestrian volumes and patterns to/from building entry/exit locations, and volume/capacity relationships at the South Station "Red Line" and commuter rail services. Required mitigation,

if any, will focus upon demand reduction strategies to encourage site assess by public transit.

The Transportation Access Master Plan will include the following components:

- Traffic Management
- Parking Management
- Construction Management
- Monitoring Plan

D. Environmental Protection Component

1. **Wind:**
   - Both Dewey Square and Atlantic Avenue have substantial pedestrian traffic. The architect is designing the project to minimize the wind effects of the new buildings. A qualitative evaluation of the wind effects of the project will be included in the Project Impact Report.

2. **Shadow:**
   - Some new shadows will be created in the surrounding area since the project substantially increases the height of structures at South Station. Shadow studies will be undertaken as part of the Project Impact Report.

3. **Daylight Studies:**
   - The project could result in some obstruction of daylight. A sky dome analysis will be undertaken to predict daylight obstruction, where appropriate.

4. **Solar Glare:**
   - The architect will be selecting materials for the building that reduce the potential for solar glare. Solar glare will be addressed in the Project Impact Report. Similarly, the project could result in some daylight obstruction. A sky

dome analysis will be conducted, as appropriate, to determine any daylight obstruction.

5. **Air Quality:**

- The project will not involve manufacturing or any large-scale processes that will release air contaminants to the atmosphere. Small quantities of various chemicals used in laboratory research will be released to the atmosphere through fume hoods. Significant adverse impacts from such releases are considered unlikely because of the small quantities involved and the stack configuration expected to be selected for this building. The proposed project may include natural gas-fired boilers to serve Sections A2, B2, and C2 with combined total output capacity of 116 million BTUs per hour. Five diesel engine-driven emergency generators of approximately 1,000 kilowatts (kW) capacity each would be supported by 30,000 gallons of diesel fuel with on-site storage. Fume hoods, used as safety devices, will discharge exhaust to the atmosphere. Known substances such as radioactive materials or other airborne contaminants will be controlled by filtration before discharge. Kitchen-type fume hoods may be necessary for the project.

  The construction phase of the project will require truck deliveries, excavating equipment, cranes for steel erection, and other mechanical equipment. Contractors will be required to meet federal, state, and local regulations. Impacts to ground level are expected to be minimal, since AR-5 will be used as a staging area for equipment during construction. Construction dust will be controlled by means of wetting and the use of products in accordance with federal, state, and local regulations.

  The air quality impacts of the traffic generated by this project and the transportation facilities located below the project have been considered in the environmental studies supporting the CA/THT project and MBTA project. Air quality studies, as appropriate, will be included in the Project Impact Report.

These studies will address the air quality impacts of the parking facility, if it is not self-ventilating.

6. **Water Quality:**
   - The project is an air rights development and is therefore not expected to produce significant changes in drainage patterns. The project will not result in the introduction of any pollutants, including sediments, into marine waters, surface water, or groundwater. Potential runoff during construction will be controlled by measures developed in accordance with appropriate local, state, and federal agencies. Any introduction of water with sediments or pollutants would only be done pursuant to sewer use discharge permit requirements.

7. **Flood Hazard Zones/Wetlands/Filled Tidelands:**
   - The project will be built on air rights. It will not impact a flood hazard zone or wetland area. The site is located over formerly filled tidelands. To the extent required, the proponent will comply with any necessary licensing requirements.

8. **Groundwater:**
   - The project is not located over any aquifer recognized as a present or future source of water supply. The project will not result in the introduction of pollutants, including sediments, into the groundwater.

9. **Geotechnical:**
   - The structural design for the MBTA bus terminal and parking facility at the southerly end of the transportation center, south of column line 20/21 (MBTA Phases 2A and 2B) is intended to accommodate subsequent air rights development. North of column line 20/21 additional foundation support will be required. This additional foundation support is planned by TUDC and the MBTA in connection with Phase 2C of the MBTA project, which will consist of an expansion of the bus terminal and parking facility.

10. Solid and Hazardous Waste:

- The proposed project and project construction will generate waste material such as lab chemical waste and domestic solid waste. These will be disposed of off-site by licensed refuse haulers to approved sites and recycled as required.

  Small quantities of various chemicals and other materials may be used for research and instruction in the laboratories. Tufts has a long-standing practice of careful management of potentially hazardous materials in accordance with applicable laws and regulations, including careful use and handling of materials, detailed record keeping, and documentation of all materials through transportation and disposal at licensed and approved sites. Hazardous wastes generated by the proposed project will generally comprise the types and quantities of chemical, biological, and radiological wastes typically associated with research laboratories. Transportation and disposal of any hazardous materials generated or used in connection with the operation of the project will be conducted by licensed contractors. Accordingly, significant adverse impacts resulting from the use, storage, and disposal of potentially hazardous materials at and from the project are considered unlikely.

  Since the proposed site is an air rights development, no use, generation, transportation, storage, release, or disposal of potentially hazardous materials is known to have occurred on the site.

  South Station is listed on the Massachusetts DEP *List of Confirmed Sites and Locations to Be Investigated.* However, the ramps to street level from Section B of the development are expected to connect outside of the slurry wall for the new Central Artery in clean fill material. Pile driving during construction is the only activity that could encounter hazardous waste. Any hazardous waste encountered will be handled in accordance with the pertinent state, federal, and local regulations.

11. Noise:

- The site is located in an urban downtown environment with high background noise levels. These include automobile and truck traffic on Atlantic Avenue, train traffic entering South Station, and industrial/commercial noises associated with nearby and adjacent properties.

  Noise will be generated during the construction phase of the project by activities such as construction traffic, excavation and foundation work, and the operation of construction equipment. Construction noise levels will comply with applicable state and city of Boston noise regulations. The operation of the completed facility will result in a minimal increase in ambient noise levels due to HVAC and exhaust equipment. Most mechanical equipment will be housed inside the building, and it is expected that the project will result in no significant increase in ambient noise levels on the site or adjacent properties. Similarly, increases in ambient noise levels due to traffic as a result of the project is expected to be minimal.

12. Construction Impact:

- Construction impacts will be addressed in the Project Impact Report. The MBTA project will be completed before construction of the Tufts International Biomedical Research Center. The CA/T project will be ongoing and construction impacts will need to be coordinated carefully. The proponent expects to enter into a construction management plan with the City of Boston in connection with the project.

13. Rodent Control:

- Rodent control problems are not anticipated.

E. Urban Design Component

The design for the Tufts International Biomedical Research Center is based upon several explicit design objectives including the following:

- Reinforce city massing patterns

- Complete the physical definition of Dewey Square.
- Create a striking gateway image.
- Reinforce the prominence of South Station as a major city landmark.
- Reinforce the Atlantic Avenue street edge.
- Improve street and sidewalk amenities and pedestrian circulation.
- Add a distinctive building complex to the urban skyline.
- Create an architecture compatible with and different from the historic Leather District.

The proposed development is consistent in use, scale, and massing with the planned expansion of South Station. The South Station Intermodal Transportation Center forms the base upon which the new structures will rest. This project is surrounded by historic and new commercial buildings of the downtown business district, Atlantic Avenue/South Street area, and the Stuart/Kneeland Street corridor. The laboratory buildings planned for the Tufts International Biomedical Research Center are consistent with the existing and proposed medical research facilities in the Stuart/Kneeland Street area. The future proposed 40-story tower is considered by the BRA as an important element to the future of Dewey Square.

As part of the Project Impact Report, an urban design analysis will be prepared. It will address the following:

- Architectural compatibility
- Relationship to subdistrict urban design features
- Quality of pedestrian environment
- Consistency with established guidelines

F. Historic Resources Component

The project site is located adjacent to the South Station headhouse, which is on the National Register of Historic Places. The project site is not designated as a Boston Landmark or National Historic Landmark. The project will be designed to respect and be compatible with the South Station headhouse and the adjacent Leather District. As an air rights parcel, the site area is not known to contain any archeological resources.

G. Infrastructure System Component

1. Water:

- Table 3 indicates the estimated peak and average water consumption generated by the project. The impact of the project on the water system will be addressed in the Project Impact Report.

TABLE 3

PROJECTED DAILY WATER USE

Building Type	Area (gsf)	Average Domestic Water (gpd)	Cooling Water (gpd)	Total Use Average (gpd)	Total Use Peak (gpd)
Lab 1 (C2)	190,000	57,000	28,800	57,000	85,800
Lab 2 (C2)	190,000	57,000	28,800	57,000	85,800
Lab 3 (B2)	125,000	37,750	19,200	37,750	56,950
Office (B2)	525,000	40,000	28,800	40,000	68,800
Hotel (B2)	400,000	95,000	45,800	95,000	140,800
Office Tower (A2)	1,000,000	75,000	57,600	75,000	132,600
(Lab 1, 2, 3, and office and tower) TOTAL A				266,750	429,950
(Lab 1, 2, and hotel and tower) TOTAL B				284,000	445,000

No water usage is proposed for Sections A1, B1, and C1 parking.

2. Sewer:

- The proposed project will generate a peak use of 335,420 gallons per day of sanitary wastes. The sewage disposal will be through the Boston Water and Sewer

Commission (BWSC) system. The generated sewage will include lab wastewater and sanitary sewage, including cooling water blow down. Lab water will be collected from lab bench sinks and cup sinks. The sanitary sewage will be from public toilets and kitchen facilities. The cooling towers serve the air conditioning system and will have peak flow during the summer months. The lab waste and sanitary sources of sewage will be kept separate within the buildings but will be combined after leaving the buildings for connection to the municipal sewer system (BWSC). Table 4 shows the projected daily sewage generation. The impact of the project on the sewer system will be addressed in the Project Impact Report.

TABLE 4
PROJECTED DAILY SEWAGE GENERATION

Building Type	Area (gsf)	Lab Waste (gpd)	Sanitary Waste (gpd)	Tower Blow Down (gpd)	Total Average (gpd)	Total Peak (gpd)
Lab 1 (C2)	190,000	47,500	9,500	9,180	57,000	66,180
Lab 2 (C2)	190,000	47,500	9,500	9,180	57,000	66,180
Lab 3 (B2)	125,000	31,500	6,250	6,120	37,750	43,870
Office (B2)	525,000	-	40,000	9,180	40,000	49,180
Hotel (B2)	400,000	-	95,000	14,700	95,000	109,700
Office Tower (A2)	1,000,000	-	75,000	18,360	75,000	93,360
(Lab 1, 2, 3, and office and tower) TOTAL A					266,750	318,770
(Lab 1, 2, and hotel and tower) TOTAL B					284,000	335,420

No sewage generation is proposed for Sections A1, B1, and C1 parking.

3. **Other Utilities:**
   - Space heating will be provided for Sections A2, B2, and C2 of this project. Two options of heating systems are being considered: (1) on-site natural gas-fired boiler plant to generate steam and hot water, and (2) purchased district steam. The estimated energy consumption for space heating is approximately 51 million BTUs per hour.

The project will require steam for various lab equipment and related processes such as sterilization. Steam will also be utilized for maintaining environmental conditions, heating, make-up for lab hoods, and the generation of hot water for domestic and lab use. Two options being considered for process steam are: (1) on-site natural gas-fired boiler plant to generate steam, and (2) purchased district steam.

The project will also generate electrical and telephone demand, which will be served by local systems.

III. COORDINATION WITH OTHER GOVERNMENTAL AGENCIES

A. Boston Civic Design Commission Review

The project is subject to review by the Boston Civic Design Commission.

B. Boston Landmarks Commission Review

The project will not require review with the Boston Landmarks Commission.

C. Massachusetts Environmental Policy Act

The South Station redevelopment project, including portions of the South Station Air Rights Development, has been the subject of extensive prior environmental review under the Massachusetts Environmental Policy Act (MEPA). On April 24, 1979, the Secretary of Environmental Affairs designated the South Station redevelopment project a major and complicated project. A Final Environmental Impact Statement (EOEA No. 3205), prepared in June 1981 by the United States Department of Transportation, Federal Railroad Administration, included a proposed alternative involving a variety of transportation improvements, parking facilities totalling 2,000 cars, and an air rights hotel/office/light industry component (most recently approved by EOEA on May 16, 1991). Supplemental environmental information subsequently was submitted by the MBTA to EOEA for its proposed parking and bus station facilities and approved by the Secretary on May 16, 1991. In addition, the

environmental studies supporting the CA/THT Project included consideration of the South Station Air Rights Development Project. Their analyses assumed that the parking facility component of the project would contain 2,000 spaces. The parking facility now proposed for the MBTA project and the Tufts International Biomedical Research Center will contain less than 1,350 spaces, a substantial reduction from former plans.

An Environmental Notification Form (ENF) for the project, dated June 1, 1992, was filed with the MEPA Unit. On September 30, 1992, the Secretary of Environmental Affairs issued a certificate designating the project as Major and Complicated and establishing a special procedure for its review.

Under the Secretary's Certificate, the project proponent will prepare a Project Overview Analysis, evaluating overall project impacts on a gross scale. Individual environmental assessments will also be prepared for each phase of the project. This will ensure that each phase of the project is fully studied in the context of a broad evaluation of the overall project. It is expected that the first environmental assessment (for Section C) and the Project Overview Analysis will be prepared simultaneously.

The proponent intends to submit an overall Project Impact Overview analyzing the project generally and individual Project Impact Reports for each section of the project under Article 31. Such submissions would be joint submissions under Article 31 and MEPA.

D. Architectural Access Board

The project will comply with the appropriate requirements of the Architectural Access Board.

E. Other Agencies

The proponent will work with other agencies, as necessary, and with the Boston Redevelopment Authority in providing information about the project to local groups.

IV. PROJECT CERTIFICATION

This form has been circulated to all agencies and persons as required by Boston Zoning Code, Article 31, Section 31-5(1).

D B Moffatt
Signature of Proponent's Representative
David Moffatt, Senior Vice President
TUDC, Inc.
755 Atlantic Avenue
Boston, MA 02111

12/9/92
Date

Elizabeth K Levin
Signature of Person Preparing
Elizabeth K. Levin, Vice President
Rizzo Associates, Inc.
235 West Central Street
Natick, MA 01760

December 8, 1992
Date

2094-03\209403-F.PNG.JMG